

ADDITIONS TO THE PRELIMINARY CHECKLIST OF
VASCULAR FLORA OF CONNECTICUT

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ABSTRACT

Forty-six native or naturalized species, varieties, or hybrids are reported as additions to Dowhan's Preliminary Checklist of the Vascular Flora of Connecticut. These represent 21 native taxa and 25 apparently naturalized taxa. Each taxon is presented with a brief history of its discovery in Connecticut. Dates are presented for the earliest known voucher specimen for each addition.

Key words: Connecticut, flora, vascular plants, additions

The following list of taxa represents additions to the non-cultivated flora of Connecticut that have been discovered since the publication of the PRELIMINARY CHECKLIST OF THE VASCULAR FLORA OF CONNECTICUT (Dowhan 1979). Most are new discoveries although the recent annotation of specimens collected prior to 1979 accounts for some of the new records. In some cases taxa considered here were not included in regional floristic treatments such as Fernald (1950), Seymour (1969), or Gleason and Cronquist (1963, 1991). Some taxa appear to be adventive and it remains to be seen whether or not these will become established in Connecticut

41 species, 2 varieties, and 3 naturally occurring hybrids in 29 families are reported. 21 taxa appear to be native while the remaining 25 appear to be non-native or ruderal taxa and should be considered as adventive or naturalized. One new family, the Hymenophyllaceae, is added to the flora. (Six taxa are listed as Endangered and three as Special Concern Species on the Connecticut list of Endangered, Threatened, or Special Concern Species (Department of Environmental

Protection 1993). 34 records are from recent discoveries and 12 records represent additions due to revisionary reevaluations.

It seems prudent to follow the family order as presented in Dowhan (1979). Taxa within families are alphabetized by genus, and those within genera are alphabetized by species. However, familial names used here all end in *-aceae*, alternative names being used for the sake of consistency in certain families. Nomenclature follows the Flora of North America (Flora of North America Editorial Committee 1993) for pteridophytes and Gleason and Cronquist (1991) for angiosperms.

A single specimen is cited at the end of the discussion for each taxon. Citations are for the earliest voucher specimen known to me. No attempt has been made to include multiple vouchers from different herbaria where duplicates may have been deposited, although I am aware many exist. These records represent collections deposited at CONN, GH, MASS, NCBS, NEBC, NYS, and YU (Holmgren *et al.* 1990).

Distributional information comes from Flora of North America, Volume 2 (Flora of North America Editorial Committee 1993) for pteridophytes and Gleason and Cronquist (1991) for angiosperms unless otherwise noted. A table summarizing all additions and a map showing Connecticut's 8 counties are included. .

LYCOPODIACEAE

Lycopodiella alopecuroides (L.) Cranfill

Foxtail Club-moss

This taxon was originally reported as *Lycopodium alopecuroides* L. by Edwin H. Eames from Milford, New Haven County in 1908. Eames also collected *L. alopecuroides*

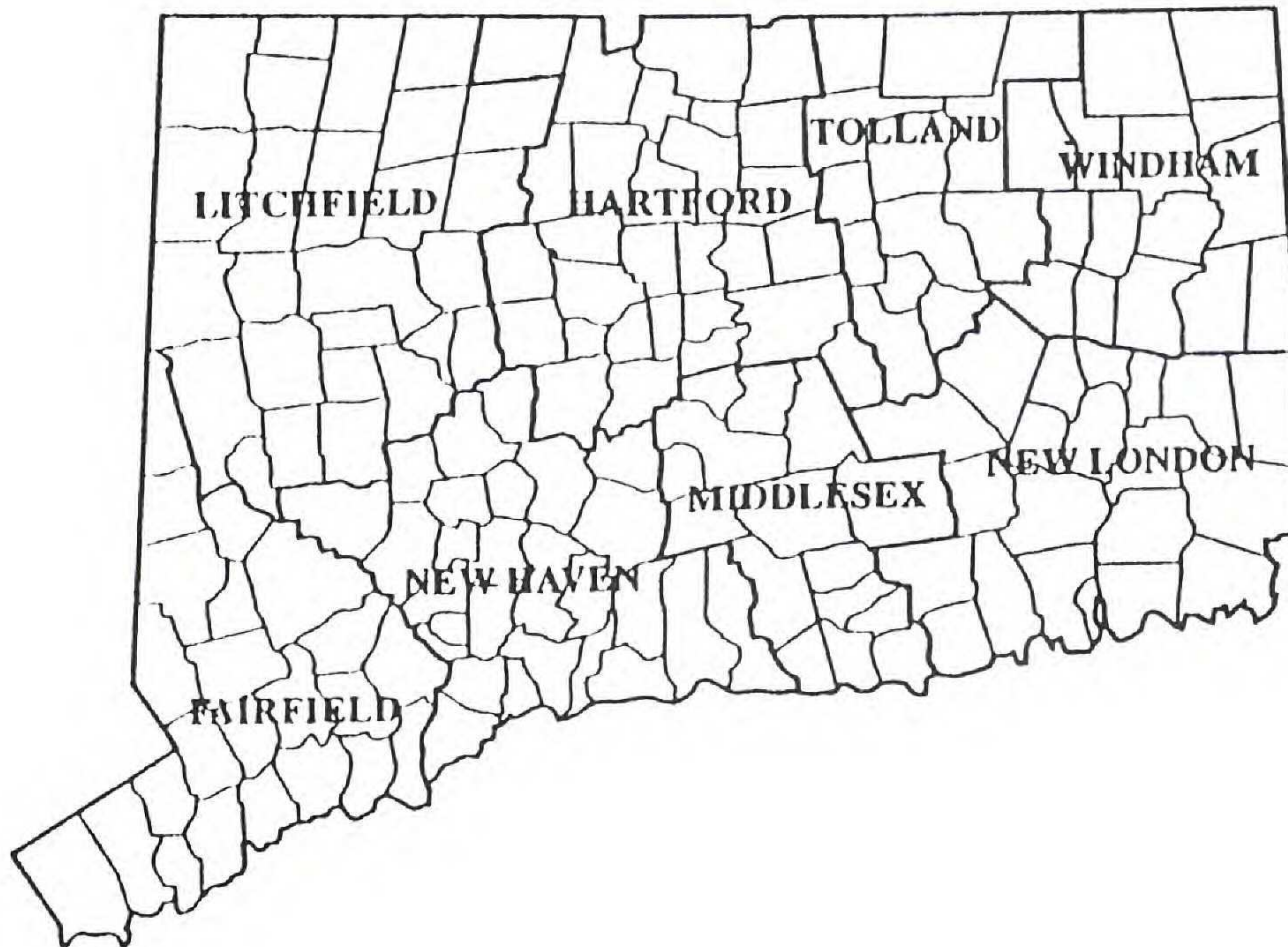


Figure 1. Map of Connecticut showing County and Town Boundaries.

in Fairfield County. The correct identification of the specimens had been questioned by Joseph Dowhan and others. Revisionary work by the late Joseph Beitel and Warren H. Wagner, Jr. has confirmed Eames' original determination. This species, under the synonym *Lycopodium alopecuroides* L. is listed as a Species of Special Concern in Connecticut (DEP 1993).

Distribution: Texas and Louisiana, north to Rhode Island and Massachusetts, mostly on coastal plain but inland to western North Carolina and northern Georgia.

[26 SEP 1908, E. H. Eames *s. n.* (CONN)]

Lycopodiella xcopelandii (Eiger) Cranfill. [*Lycopodiella alopecuroides* (L.) Cranfill x *L. adpressa* (Lloyd & Underw.) Cranfill] . Hybrid Bog Club-moss

Numerous Connecticut specimens were annotated as this hybrid by Florence S. Wagner and Warren H. Wagner, Jr. These records were from Fairfield, New Haven, and Middlesex Counties. The late Joseph Beitel had called my attention to a collection in the G. Safford Torrey Herbarium (CONN) from Simsbury, Hartford County, of a *Lycopodiella* which he determined to be *L. xcopelandii*. Subsequent evaluation of material from that herbarium did not yield a specimen which the Wagners felt comfortable in assigning to this hybrid taxon.

Distribution: This taxon can be expected anywhere within the range of either parent species.

[30 AUG 1907, E. H. Eames *s. n.* (CONN)]

SELAGINELLACEAE

Selaginella eclipses Buck. Buck's Meadow Spike-moss

This spike-moss is confused with the common *Selaginella apoda* (L.) Spring and may have been overlooked in the northeast. In 1982 Terry R. Webster found specimens determined as *S. apoda* collected in western Connecticut which matched Buck's description of this species (Buck 1977). Numerous calcareous localities in western Connecticut have yielded plants whose morphologies are intermediate between *S. eclipses* and *S. apoda*, adding to the confusion surrounding this taxon. Specimens, which we identified as *S. eclipses*, taken from the floor of an abandoned limestone quarry have recently been confirmed by Iván A. Valdespino at the New York Botanical Garden. Shortly after collecting these specimens from the quarry floor, the quarry was reactivated for processing marble. It now appears to have been abandoned

again and should be revisited. Any specimen from calcareous areas and growing in full sun presumed to be *S. apoda* should be given more than a cursory glance.

Distribution: Western Quebec and eastern Ontario south through western New York to Oklahoma and Arkansas.
[26 APR 1983, L. J. Mehrhoff 7546, with T. R. Webster (CONN)]

OSMUNDACEAE

Osmunda xruggii Tryon [*Osmunda claytoniana* L. x *O. regalis* L. var. *spectabilis* (Willd.) Gray]

Interrupted Royal Fern

This very rare hybrid was first collected in Wilton, Fairfield County, Connecticut in 1931 by Leonard J. Bradley. The type specimen came from a garden in Hartford, by way of the garden of Dr. Harold G. Rugg of Dartmouth College in New Hampshire (Tryon 1940). The last Wilton collection appears to be from 1938. It is not currently known to be extant in Connecticut.

Distribution: Fairfield County, Connecticut and Craig County, Virginia.
[14 JUN 1931, L. J. Bradley *s. n.* (GH)]

HYMENOPHYLLACEAE

Trichomanes intricatum Farrar. Appalachian *Trichomanes*

The species name *Trichomanes intricatum* Farrar has only recently been published (Farrar 1992) although the gametophyte has been known for several years (Farrar *et al.* 1983). This fern gametophyte, which apparently never produces a sporophyte, was reported from Kent and Norfolk, Litchfield County in 1983 by Donald R. Farrar, James C. Parks, and

Bruce W. McAlpin (Farrar *et al.* 1983). Gametophytic plants of *Trichomanes intricatum*, once described to me by Rolla Tryon as “resembling green steel wool” can be easily overlooked. It has recently been found in Hartland, Hartford County and should be looked for in other areas. It is a Species of Special Concern in Connecticut, listed as *Trichomanes* sp. (DEP 1993).

Distribution: Central Vermont and New Hampshire south along the Appalachian uplands to Alabama and Georgia, disjunct in southern Illinois and Indiana and western Kentucky.

[30 SEP 1991, L. J. Mehrhoff 15299, with M. Ardwin, J. Barrett, and N. Proctor (CONN)]

PTERIDACEAE

Pellaea glabella Mett. ex Kuhn subsp. *glabella*

Smooth Cliff-brake

The smooth Cliff-brake was first reported from Connecticut in 1988 from a single calcareous outcrop in Salisbury, Litchfield County by Karen S. Hansen and Robert E. Schneider. The population seems to be well established as there are many individuals in the population. It is listed as an Endangered Species in Connecticut (DEP 1993).

Distribution: Vermont to Minnesota and south to Tennessee, Virginia, and western Maryland.

[27 JUN 1988, K. S. Hansen and R. E. Schneider 241 (CONN)]

ALISMATACEAE

Echinodorus tenellus (Mart.) Buchenau

Burhead

This small aquatic was first reported in Connecticut from a

pond margin in Glastonbury, Hartford County in 1989 by William Moorhead. No individuals of *Echinodorus* were observed at this station for three subsequent years. This is not atypical for this taxon (C. B. Hellquist pers. comm.). A small number of plants of *Echinodorus* were seen at this site in 1993 (K. J. Metzler pers. comm.). Numerous plants in flower and fruit were observed in 1994. This appears to be the only extant New England population. It is listed as an Endangered Species in Connecticut (DEP 1993).

Distribution; Tropical America north along the Atlantic Coast irregularly to Massachusetts, up the Mississippi River to Illinois, Missouri, occasionally Kentucky and Kansas.
[18 AUG 1989, K. J. Metzler 89001 (CONN)]

HYDROCHARITACEAE

Egeria densa Planch.

This aquatic species is commonly grown in aquaria. *Egeria densa* was introduced, apparently intentionally, in Westport, Fairfield County where it has persisted. It also has been occasionally introduced in Massachusetts and Vermont (Crow and Hellquist 1982). It should be watched for elsewhere in southern New England. It might be confused with species of *Elodea*.

Distribution: Occasional in northeastern United States. Native of South America, from southeastern Brazil to northern Argentina.

[20 AUG 1992, P. Aarrestad s. n. (CONN)]

POACEAE

Aira praecox L.

This European Hairgrass was first reported from Norwich,

New London County in 1992. The population was well established in sandy soils of a “jug-handle” at the junction of Routes 2 and Interstate I-395. It was not noticed at this site in 1982 when collections were made in the same locality. A second station was found near an exit ramp off the interstate in Old Lyme, New London County in 1994.

Distribution: Eastern Connecticut to Virginia, usually near the coast. Native of Europe.

[12 JUN 1992, L. J. Mehrhoff 15618 (CONN)]

Microstegium vimineum (Trin.) A. Camus

The precise history of this species in Connecticut is somewhat unclear. Lauren Brown (pers. comm.) observed this species in Branford, New Haven County in the early 1980s but apparently no specimens were taken. In 1990 a population of this species was observed in East Haddam, Middlesex County by T. Hendrickson and collected under the name *Eulalia viminea* (Trin.) Ktze. By 1991 it appeared to be well established at numerous sites in New London (W. Dreyer pers. comm.) and Fairfield Counties and at single sites in both Hartford and Litchfield Counties. Tolland County specimens are from unwanted volunteers, probably from fruits falling from New Jersey material while it was being pressed. (Repeated attempts have been made to eradicate this species at this site.) The first North American collection of *Microstegium vimineum* was made in 1919 in Knoxville, Tennessee (Fairbrothers and Gray 1972). It was first collected in New Jersey in 1959 (Fairbrothers and Gray 1972). This invasive grass is now well established in many areas in northern New Jersey, Pennsylvania, and southeastern New York (Hunt and Zaremba 1992; pers. obs.). It occurs along roadsides, in alluvial woods, on serpentine barrens, and ruderal habitats and can form extensive stands to the exclusion of almost every

thing else. This species should be closely monitored and controlled if at all possible.

Distribution: Connecticut and New York southward. Native of tropical Asia.

[19 SEP 1990, T. Hendrickson *s. n.* (NCBS)]

Panicum amarulum A. Hitchc. & Chase

Panicum amarulum was first taken in Connecticut from a roadside in Hebron, Tolland County in 1983. It is also known from North Haven, New Haven County. *P. amarulum* may have been originally introduced as an ornamental or accidentally introduced with roadside plantings or seeding at these sites. It is now spreading and appears to be well established. *Panicum amarulum* is not thought to be native north of New Jersey. Massachusetts records from Cape Cod are thought to be introductions (B. Sorrie pers. comm.). It is treated here as distinct from *Panicum amarum* Ell.

Distribution: New Jersey to Mexico, occasionally inland in North Carolina and West Virginia.

[12 SEP 1983, L. J. Mehrhoff 9240 (CONN)]

Panicum scabriusculum Elliott

This species was originally collected as *Panicum aculeatum* Hitchc. & Chase in Stafford, Tolland County on 21 JUN 1911 by Charles H. Bissell. A specimen from this collection was determined not to be *Panicum aculeatum* by Joseph J. Dowhan (1979). A duplicate collection was later discovered at the Smithsonian Institution (US) that had been annotated as *Dichanthelium scabriusculum* (Elliott) Gould & Clark by the late F. C. Gould and C. A. Clark. A recent specimen of *Panicum scabriusculum* was collected in Voluntown, New London County, in 1989 by William J. Crins. This species is listed under *Dichanthelium scabriusculum* as an Endangered

Species in Connecticut (DEP 1993).

Distribution: Connecticut and New Jersey to Florida and Texas.

[13 JUN 1989, W. J. Crins 7628 (NYS)]

Vulpia myurus (L.) C. Gmelin Rat-tail Fescue

Vulpia myurus was collected at two sites less than 1 km from each other near Long Island Sound in Fairfield, Fairfield County on 28 JUL 1992. Both sites were open, sandy disturbed areas. One site was along a path to Long Island Sound and the other was adjacent to a gravel parking area removed from the coast. The spikelets were disarticulating at the time of collection, specimens from other localities should be sought at an earlier date.

Distribution: Widespread. Native of Europe.

[28 JUL 1992, L. J. Mehrhoff 15919, with W. E. Brumback (CONN)]

CYPERACEAE

Carex backii Boott

Vegetative material, thought to be *Carex backii*, was collected on a marble ridge in Canaan, Litchfield County by Thomas Rawinski in 1988. In 1992, Elizabeth Thompson, reportedly unaware of Rawinski's find, collected fertile material of *C. backii* from the same calcareous ridge. It seems reasonable, in light of Thompson's collection, to assume Rawinski's specimen's belongs to this taxon. Because of its apparent rarity in the state, this species should be considered for inclusion on Connecticut's list of protected species.

Distribution: Quebec to New Jersey, west across to Minnesota, Utah, Oregon, and British Columbia.

Carex emoryi Dew.

A 1907 Edgar B. Harger collection of *Carex aquatilis* Wahlenb. was determined by Lisa Standley in 1990 to be *Carex emoryi*. Harger had collected the specimen in “wet ground at Selden’s Cove”, Lyme, New London County, Connecticut. This is the same locality from which nineteenth century specimens of *Nelumbo lutea* (Willd.) Pers. were taken. *Nelumbo lutea* and *Carex emoryi* have similar distributions. I am suspicious of the nativeness of *Nelumbo* at this site.

Distribution: Southern New York to North Dakota and Manitoba, south to Virginia, Arkansas, and Texas.

[22 JUN 1907, E. B. Harger 5141 (NEBC)]

Cyperus echinatus (L.) Wood

Collections of William R. Dudley from North Branford made in 1881 found in Yale’s D. C. Eaton Herbarium (YU) have been annotated by Gordon C. Tucker to *Cyperus ovularis* (Michx.) Torr. a synonym for *Cyperus echinatus*.

Distribution: Connecticut and New York to southern Ohio, Illinois, and eastern Kansas, south to Florida and northeastern Mexico.

[1 JUL 1881, William R. Dudley *s. n.* (YU)]

Rhynchospora scirpoides (Vahl) Griseb.

This was originally reported as *Psilocarya scirpoides* Torr. from a shallow pond margin in Simsbury, Hartford County in 1981 (Mehrhoff 1982b). It has been reported as recently as 1990 at the same site. A 1994 visit to Great Pond yielded no plants of *Rhynchospora scirpoides* and little suitable habitat due to increased water level. Active management is urgently needed at this site. It is listed under *Psilocarya scirpoides* as an Endangered Species in Connecticut (DEP 1993),

Distribution: Eastern Massachusetts and Rhode Island,

northwest Indiana, southwest Michigan, southeastern Virginia and eastern North Carolina.

[3 SEP 1981, L. J. Mehrhoff 5454 (CONN)]

LILIACEAE

Ornithogalum nutans L. Nodding Star-of-Bethlehem

Ornithogalum nutans was collected from Groton, New London County in 1983 by E. A. Christensen, M. W. Lefor, and R. Piacentini (Christensen and Lefor 1985). A previously unidentified collection of this taxon from East Haddam, Middlesex County was identified by Eric Christensen in 1984. It is questionable whether or not either of these populations are established.

Distribution: Occasionally escaped from cultivation. Native of western Asia.

[20 MAY 1983, E. A. Christensen, M. W. Lefor, R. Piacentini 842 (CONN)]

ORCHIDACEAE

Malaxis bayardii Fernald

Recent annotations of specimens of *Malaxis unifolia* Michx. from the New England Botanical Club Herbarium (NEBC) by Paul M. Catling of Agriculture Canada have shown *Malaxis bayardii* to have occurred in Connecticut. Annotated records come from Enfield, Hartford County and Bolton and Somers, Tolland County. The differences between these two species are slight and easily overlooked (Catling 1991). Other herbarium holdings of *M. unifolia* should be checked. *M. unifolia* is listed as an Endangered Species in Connecticut (Department of Environmental Protection 1993). *M. bayardii* should be added to the list as a Species of Special Concern until it

can be ascertained whether or not it is extant in the state.

Distribution: Massachusetts and New York south to Virginia and North Carolina (Catting 1991).

[1896, Arthur S. Pease *s. n.* (NEBC)]

URTICACEAE

Pilea fontana (Lunell) Rydberg

This taxon has probably been overlooked in the northeast for many years. Seymour (1969) does not include this species. I collected specimens of it from the edge of a wooded swamp in Farmington, Hartford County in September, 1992. This prompted a close scrutiny of material of *Pilea pumila* (L.) Gray from Connecticut at the G. Safford Torrey Herbarium (CONN). It appears that in 1991 Nels E. Barrett, while working on freshwater tidal vegetation along the Connecticut River, had collected specimens of *Pilea fontana* (as *P. pumila*) from East Haddam, Middlesex County.

Distribution: Prince Edward Island to North Dakota and Nebraska south to Indiana and Virginia.

[9 SEP 1991, Nels E. Barrett 00501 (CONN)]

CHENOPODIACEAE

Bassia hirsuta (L.) Aschers.

Individuals of this taxon were reported from a disturbed salt marsh in Mystic, Stonington, New London County in 1979 by William R. Linke, Jr. A small population was growing at the edge of the salt marsh with *Phragmites australis* Cav.) Trin.

Distribution: Massachusetts to Virginia. Native of Europe.
[18 SEP 1980, L. J. Mehrhoff 3333, with W. R. Linke (CONN)]

Kochia sieversiana (Pall.) C. C. A. Meg.

Connecticut's only record for this species was collected as *Bassia hyssosifolia* (Pallas) Kuntze from sea wrack along the Mystic River in Stonington, New London County, by Gordon C. Tucker in 1981. A specimen of this collection in the New England Botanical Club Herbarium (NEBC) was annotated to *Kochia sieversiana* by the Curator, Ray Angelo, in 1989.

Distribution: Apparently not previously reported from the Northeast. Native of Siberia (Shishkin, ed. 1970).

[17 AUG 1981, G. C. Tucker 1668 (NEBC)]

AMARANTHACEAE

Amaranthus pumilus Raf. Seabeach Amaranth

An 1893 specimen of this species, collected in New London, New London County, has recently been located in the New York State Museum. The label has no additional locality information. This species is listed as a Threatened Species by the U. S. Fish & Wildlife Service (USFWS 1993) and as a Connecticut Species of Special Concern (DEP 1993).

Distribution: Massachusetts to North Carolina.

[11 JUN 1893, *sine* collector (NYS); the specimen originally from Union college]

CARYOPHYLLACEAE

Sagina japonica (Sw.) Ohwi

This species was first reported from a stairwell in New London, New London County in 1988 by Virginia Magee. Collections were determined to be *Sagina japonica* by Garrett E. Crow (Mitchell and Tucker 1991). It may be overlooked (cf. Gleason and Cronquist 1991, Mitchell and Tucker 1991)

and should be sought elsewhere.

Distribution: Massachusetts, Connecticut, and New York.

Native of Japan and China.

[5 JUL 1988, Virginia L. Magee 88-33 (NCBS)]

PAPAVERACEAE

Glaucium flavum Crantz

Glaucium flavum is occasionally adventive in southern New England. A specimen in the G. Safford Torrey Herbarium (CONN) was collected in Groton, New London County in 1933. *Glaucium flavum* appears to persist on sandy shores of nearby eastern Long Island although there is some confusion as to whether it is an annual, biennial, or perennial. It is surprising that more seeds from the New York populations do not become established along the eastern Connecticut shoreline.

Distribution: Massachusetts to Virginia, and occasionally inland to Michigan. Native of Europe.

[6 JUL 1933, K. P. Jansson *s. n.* (CONN)].

FUMARIACEAE

Corydalis bulbosa Pers.

This early spring ephemeral was first reported in Connecticut from a wooded bank near a road and along an abandoned rail road right-of-way in Salisbury, Litchfield County in 1982 by H. Lincoln Foster and me. Photographs, but no specimens, were taken at that time (29 APR 1982). It appeared to be well established. Although the source of the original plants is not known, we suspected that they may have come from a compost heap a dozen meters away. This seems likely given that the seeds are readily dispersed by ants (*pers. obs.*) and this

taxon has proved to be troublesome by virtue of its invasive nature in some gardens (W. E. Brumback pers. comm.). However, no check of the compost pile was made as the property was heavily posted. The site was revisited in 1992 and the plants appeared to be persisting but the numbers of observed individuals seemed to have declined. The long-term persistence of this taxon at this station is questionable.

Distribution: Garden escape. Native to central Europe (Bailey 1949).

[11 MAY 1992, L. J. Mehrhoff 15461 (CONN)]

BRASSICAEAE

Bunias orientalis L.

This species was first observed in Ridgefield, Fairfield County in 1989 by D. Norris. . A second population was noticed in Goshen, Litchfield County in 1994. This population is uncomfortably close to the entrance to an exclusive country club and may have been planted and escaped. It is unclear whether or not *Bunias orientalis* will become established in Connecticut. There are collections from Rockland County, New York at the New York Botanical Garden.

Distribution: Occasional in the eastern United States. Native of Europe.

[5 JUL 1989, David Norris *s. n.* (CONN)]

Teesdalia nudicaulis (L.) R. Br.

Teesdalia nudicaulis was first reported in Connecticut from a roadside in New London County in 1985 by Robert J. Craig and me. It appears to be well established at this site but apparently not spreading far beyond the intersection where it was first observed.

Distribution: Occasional in the United States. Native of Europe.

[9 MAY 1985, L. J. Mehrhoff 11255 (CONN)]

ROSACEAE

Agrimonia microcarpa Wallr. Low Agrimony

Genevieve J. Kline, in working on her treatment of *Agrimonia* for the Flora of North America, annotated two specimens in the New England Botanical Club Herbarium (NEBC) as this species. These had been collected in East Granby, Hartford County and Stamford, Fairfield County. Both had been previously identified as *Agrimonia striata* Michx. Other herbaria should be searched for this more southern taxon.

Distribution: New Jersey and Pennsylvania to Florida and Texas.

[25 JUN 1916, Perley Spaulding *s. n.* (NEBC)]

FABACEAE

Lespedeza cuneata (Dumont) G. Don

The first Connecticut report of this species came from the side of southbound Interstate I-95 in Groton, New London County in 1978 by William R. Linke, Jr. It has since been collected along interstate highways in Hartford, Middlesex, Windham, and Tolland Counties. Perhaps it was introduced as a component of a seed mixture used in hydroseeding roadside embankments. It appears to be well established and spreading at most sites. Volunteers should be watched for away from highway roadsides.

Distribution: Southeastern United States north to Long Island, New York and Connecticut. Native of eastern Asia.

[25 SEP 1978, W. R. Linke, with L. J. Mehrhoff *s. n.*
(CONN)]

Lespedeza striata (Thunb.) Hook. & Arn. Japanese Clover

Lespedeza striata was first reported from a roadside in Groton, New London County in 1991. The source of the original plants at this site is unclear but it may have been introduced to stabilize roadsides. This species appears to be well established and spreading at this station.

Distribution: Gulf states north to Kansas, Indiana, and Connecticut. Native of eastern Asia.

[3 OCT 1990, L. J. Mehrhoff 14075 (CONN)]

Pueraria lobata (Willd.) Ohwi

Kudzu-vine

The first Connecticut specimens of this species were taken in Fairfield, Fairfield County in 1928 by Edwin H. Eames. The labels read "Fence-row bordering field of *Phleum pratense*." It appears that he again visited the Fairfield to collect Kudzu in 1947, this time in the company of J. J. Neale. Neale collected another specimen (this time in bud) from Fairfield on which he wrote, "Another colony in 1928 by E. H. Eames." A 19 AUG 1947 specimen from Fairfield collected by J. J. Neale at the Herbarium of the Connecticut Botanical Society (NCBS) reads, "On walls and spreading for yards into field. Benson Road". It is not clear if these records represent one Fairfield population or two. Lauren Brown collected this species in 1978 in New Haven, New Haven County. *Pueraria lobata* was well established at this site. At that time, lianas reached the top of a four story building, and persisted for a number of years (L. Brown pers. comm.). It appears to have become well established at this site in spite of attempts to eradicate it. Kudzu is also established on nearby Fishers Island, Suffolk County, New York. It should be

watched for anywhere along the Connecticut coast. It may not become established far from Long Island Sound.

Distribution: Southeastern states north to New York and Connecticut. Native of Japan.

[30 JUN 1928, E. H. Eames *s. n.* (CONN)]

Strophostyles leiosperma (T. & G.) Piper

This species was reported from an abandoned gravel pit in Milford, New Haven County in 1990 by William Moorhead. *Strophostyles leiosperma* may have been introduced where it occurs, to stabilize gravel banks, but appears to be established and spreading (W. Moorhead pers. comm.). This species has recently been reported from Cape May County, New Jersey by David Snyder (1990). He questions its nativeness at the New Jersey station.

Distribution: Ohio to Wisconsin and North Dakota, south to Florida and Texas.

[20 SEP 1990, W. Moorhead 90-01-0179 (CONN)]

GERANIACEAE

Geranium nepalense Sweet var. ***thunbergii*** (Sieb. & Zucc.)

Kudo

The first report of this taxon appears to be from a roadside in New Milford, Litchfield County in 1981. That same year, the late H. Lincoln Foster had this species as a weed in his gardens at his home "Millstream" in Falls Village, Canaan, Litchfield County. The source of his material was unknown to him but it probably arrived with nursery material. This is an aggressive weed which easily spreads by seeds. Tolland County specimens are volunteers from seeds unintentionally introduced into Willington from Litchfield County by way of Coventry, Tolland County. This taxon has become

a persistent pest, even in mowed lawns. It should be assiduously sought out and removed before it becomes established.

Distribution: Massachusetts. Native of eastern Asia.
[27 AUG 1981, L. J. Mehrhoff 5252 (CONN)]

EUPHORBIACEAE

Croton glandulosus L. var. *septentrionalis* Muell. Arg.

William R. Linke, Jr. first reported a single individual of this taxon from cinder ballast at the side of a railroad in Mystic, Stonington, New London County in 1978. This individual was destroyed by construction equipment working on a nearby bridge. Seeds were produced, but subsequent visits to the site failed to reveal new plants. I recently identified a specimen of *Croton glandulosus* var. *septentrionalis* from North Haven, New Haven County in 1993. collected by John W. Souther.

Distribution: Tropical America north to Virginia, Indiana, Idaho, and Nebraska, Occasionally adventive farther north.
[10 OCT 1978, L. J. Mehrhoff 2387 (CONN)]

RHAMNACEAE

Rhamnus citrifolia (Weston) Hess & Stearn

Individuals of this taxon were first reported by Joe D. Pratt (1980) as *Rhamnus davurica* Pallas in 1976 from an overgrown old field in West Hartford, Hartford County. Label information states that numerous individuals were observed with many producing fruit. The species was extant at the same site as recently as 1986. The commonly used epithet *davurica* was replaced with the epithet *citrifolia* in 1979.

Distribution: Occasional within the Northeast. Native of northeastern Asia.

6 AUG 1978, H. E. Ahles 86054 (MASS)]

HALORAGACEAE

Myriophyllum asiaticum (Vell.) Verdc. Parrotfeather

This species was originally collected on 12 SEP 1946 as *Proserpinaca palustris* L. in shallow water of West Lake, Guilford, New Haven County by Edwin H. Eames and William I. Starr. It had been filed accordingly in the G. Safford Torrey Herbarium (CONN) until recently when it was accidentally noticed as a mis-identification by Donald H. Les. He and I recently visited West Lake, searching in vain for *Myriophyllum aquaticum*. It was not present in collections I made from the lake in 1981. It appears that this species, native to south America, may not have persisted in the colder climates of southern New England. Other herbaria should be checked for collections of this taxon. It may be filed under a synonym, *Myriophyllum brasiliense* Camb.

Distribution: Southern United States north to New York, West Virginia and Missouri. Native of South America.

[14 SEP 1946, E. H. Eames and W. I Starr 12,195 (CONN)]

GENTIANACEAE

Centaureum pulchellum (Sw.) Druce Centaury

This European species was reported from a grassy roadside, well removed from houses, in Canaan, Litchfield County in 1984 by Robert Moeller. It was collected from another roadside in Canaan in 1992.

Distribution: Locally introduced in the Northeast. Native of Europe.

[29 JUL 1984, L. J. Mehrhoff 10401 (CONN)]

CUSCUTACEAE

Cuscuta indecora Choisy

A specimen of *Cuscuta indecora*, originally labeled *Cuscuta coryli* Engelm., was recently determined by Tania Beliz from the University of California at Berkeley [UC]. It had been collected by L. B. Bradley from a dooryard in Wilton, Fairfield County.

Distribution: Illinois to California, south to Florida and South America.

[17 AUG 1940, L. B. Bradley *s. n.* (NEBC)]

LAMIACEAE

Elsholtzia ciliata (Thunb.) Hylander

Elsholtzia ciliata was first collected in Connecticut from an overgrown roadside near the Connecticut River in Cromwell, Middlesex County in 1990 by Claudia Polsky and me. It has recently been collected along the side of a highway in Canton, Hartford County. Tolland County records are of unwanted volunteers from seeds of plants originally brought to Connecticut from Morris County, New Jersey.

Distribution: Quebec, New York, and New Jersey to Wisconsin. Native of Asia.

25 SEP 1990, L. J. Mehrhoff 14007, with C. Polsky (CONN)]

SCROPHULARIACEAE

Linaria dalmatica L William R. Linke, Jr., Lois Tefft, and Gordon Tucker first reported *Linaria dalmatica* from a roadside in Ledyard, New London County in 1984 (Tucker 1987). It has also been collected from a disturbed site in Torrington, Litchfield County

in 1991.

Distribution: Occasional in northeastern United States. Native of eastern Mediterranean region.

[29 MAY 1984, G. C. Tucker 2415A (NCBS)]

***Veronica beccabunga* L.**

Brooklime

This European species was first reported from Great Falls in the Amesville section of Salisbury, Litchfield County in 1980. It did not appear to persist at this site but may well have become established below the falls where similar habitat is extensive. A second population was discovered in 1994 in a brook on the east side of Washining Lake (East Twin Lake) in Salisbury.

Distribution: Sparingly established from Quebec to Michigan and south to New Jersey and West Virginia. Native of Eurasia.

[21 OCT 1980, L. J. Mehrhoff 3417, with Sarah Fried (CONN)]

ASTERACEAE

***Aster xblakei* (Porter) House [*Aster nemoralis* Ait. x *A. acuminatus* Michx.]**

The first Connecticut record for *Aster xblakei* comes from plants growing along a mesic woodland fire road in Pachaug State Forest, Voluntown, New London County in 1982. These were collected by William R. Linke, Richard Blodgett, Edmund Smith, and Gordon Tucker (Tucker 1987). It occurs in nearby Rhode Island.

Distribution: Newfoundland, Quebec, and Nova Scotia south to New Jersey.

[16 AUG 1982, G. C. Tucker 1789 (NCBS)]

Eupatorium album L.

This southern taxon was first reported in Connecticut from thickets and rock outcrops in Groton, New London County in 1981 by William R. Linke, Jr. (Tucker 1987). He also located a second population approximately 1 km away from the first in a similar habitat. Both populations appear to be native and well established and were doing well in 1990.

Distribution: Connecticut to Florida and west to Mississippi, southern Appalachian Mountains.

[14 AUG 1981, L. J. Mehrhoff 4987 (CONN)]

Eupatorium hyssopifolium L. var. *laciniatum* A.Gray

The only Connecticut collection of *Eupatorium hyssopifolium* var. *laciniatum* came from the side of Interstate I-84 in Tolland, Tolland County in 1992. The typical variety of *Eupatorium hyssopifolium* occurs at many sites in the four Connecticut counties adjacent to Long Island Sound. This variety, more typically found to the south of Connecticut according to Gleason and Cronquist (1991), appears never to have been reported from New England. It is noticeably larger than the typical variety. *E. hyssosifolium* var. *laciniatum* has recently been collected in nearby New York (O. Blanchard pers. comm.) The proximity of plants to the highway suggests this taxon should be considered as a ruderal species in Connecticut. It may have been accidentally introduced by recent highway maintenance work in its vicinity. It should be watched for along interstates in Southern New England.

Distribution: Southern New York to Georgia, northern Florida, and Louisiana, occasionally inland to southern Ohio, Kentucky, and Tennessee.

[6 SEP 1992, L. J. Mehrhoff 16202 (CONN)]

Euthamia tenuifolia (Pursh) Nutt. var. *microcephala* Nutt.

Coastal Plain Flat-topped Goldenrod

The presence of *Euthamia tenuifolia* var. *microcephala* was brought to my attention in 1981 when Marie Pickhardt, a well known Connecticut plant collector, gave me a specimen she called *Solidago microcephala* that had been collected in Killingworth, Middlesex County that year (Mehrhoff 1982a). A check of the G. Safford Torrey Herbarium (CONN) revealed an earlier collection of *S. tenuifolia* from Groton, New London County, that had been annotated to *S. microcephala* by the late Harry Ahles, and left unmentioned. Sieren (1981) sinks this species into *Euthamia tenuifolia*, giving it no varietal status and effectively removing it from the flora of the state. Because of the similarity with *Euthamia tenuifolia* var. *tenuifolia*, *E. tenuifolia* var. *microcephala* may have been overlooked in our flora.

Distribution: Louisiana and Florida north to Maryland and Connecticut.

[7 SEP 1933, K. P. Jansson s. n. (CONN)]

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Table 1. Taxa added to the Preliminary Checklist of the Vascular Flora of Connecticut (Dowhan 1979). E=State Endangered, FT=Federally Threatened, SC=State Species of Special Concern

TAXON	First County Record	Year of First Record	Conservation Status
<i>Lycopodiella alopecuroides</i>	New Haven	1906	SC
<i>Lycopodiella xcopelandii</i>	New Have	1907	
<i>Selaginella eclipses</i>	Litchfield	1983	
<i>Osmunda xruggii</i>	Fairfield	1931	
<i>Trichomenes intricatum</i>	Litchfield	1983	SC
<i>Pellaea glabella</i> subsp. <i>glabella</i>	Litchfield	1988	E
<i>Echinodorus tenellus</i> var. <i>parvulus</i>	Hartford	1989	E
<i>Egeria densa</i>	Fairfield	1992	
<i>Aira praecox</i>	New London	1992	
<i>Microstegium vimineum</i>	Middlesex	1990	
<i>Panicum amarulum</i>	Tolland	1983	
<i>Panicum scabriusculum</i>	New London	1989	E
<i>Vulpia myurus</i>	Fairfield	1992	
<i>Carex backii</i>	Litchfield	1988	
<i>Carex emoryi</i>	Middlesex	1907	
<i>Cyperus echinatus</i>	New Haven	1881	
<i>Rhynchospora scirpoides</i> [syn. <i>Psilocarya scirpoides</i>]	Hartford	1981	E
<i>Ornithogalum nutans</i>	New London	1983	
<i>Malaxis bayardii</i>	Tolland	1896	
<i>Pilea fontana</i>	Middlesex	1991	
<i>Bassia hirsuta</i>	New London*	1980	
<i>Kochia sieversiana</i>	New London	1981	
<i>Amaranthus pumilus</i>	New London	1893	SC, FT
<i>Sagina japonica</i>	New London	1988	
<i>Glaucium flavum</i>	New Londonn	1933	
<i>Corydalis bulbosa</i>	Litchfield	1992	
<i>Bunias orientalis</i>	Fairfield	1989	
<i>Teesdalia nudicaulis</i>	New London	1985	
<i>Agrimonia microcarpa</i>	Hartford	1916	
<i>Lespedeza cuneata</i>	New London	1978	
<i>Lespedeza striata</i>	New London	1990	
<i>Pueraria lobata</i>	Fairfield	1928	
<i>Strophostyles leiosperma</i>	New Haven	1990.	

TAXON	First County Record	Year of First Record	Conserv- ation Status
<i>Geranium nepalense</i> var. <i>thunbergii</i>	Litchfield	1981	
<i>Croton glandulosus</i> var. <i>septentrionalis</i>	New London	1978	
<i>Rhamnus citrifolia</i>	Hartford	1978	
<i>Myriophyllum aquaticum</i>	New Haven	1946	
<i>Centaurium pulchellum</i>	Litchfield	1984	
<i>Cuscuta indecora</i>	Fairfield	1940	
<i>Elsholtzia ciliata</i>	Middlesex	1990	
<i>Linaria dalmatica</i>	New London	1984	
<i>Veronica beccabunga</i>	Litchfield	1980	
<i>Aster xblakei</i>	New London	1982	E
<i>Eupatorium album</i>	New London	1981	E
<i>Eupatorium hyssopifolium</i> var. <i>laciniatum</i>	Tolland	1992	
<i>Euthamia tenuifolia</i> var. <i>microcephala</i>	New London	1933	